

IOI 2017 Opens With a Warm Message



The opening ceremony of the 29th IOI was held on Saturday afternoon at Milad Complex.

The president of IOI, Dr. Krassimir Neteltchev Manev, addressed the audience with a warm message.

Below is a full text of his opening speech: "Dear guests and contestants, who would believe 29 years ago that this whole contest that was for 20 countries and 29 students would turn into something like this full house of people?" he pondered starting his speech.

More than 80 countries and more than 300 students are participating in the most interesting Olympiad in the world. Who can believe in the time when in 1998 we slept

on the floor in the University of Setúbal [in Portugal], that they would make it into an Olympiad for millions?

Who would believe that we made such progress in such a short term. Believe me, nobody of us does.

Now if you think about what was the first Olympiad whose students are here as some the team leaders, you cannot imagine what the first Olympiad was like.

The first Olympiad had one contest day only with one single task. One day, one task. Now we have two contest days, with three tasks every day.

Dear contestants, do you imagine what was the first task in the first International Olympiad in Informatics? It was finding the shortest path in a graph without weights on the edges.

I am sure that all of us can take a minute to do this task. But the tasks of nowadays, they are very heavy. We have made an enormous progress.

I am sure that your efforts, and the efforts of your teachers, and the efforts of the people who are organizing this Olympiad will help make an even bigger progress in the next year.

So my wish to the organizers of the Olympiad is to have a smooth organization, I wish all contestants to make their best, and the teachers to get a good result for their work, just for glory of your countries. Welcome in Tehran and wish you the best."



29th International Olympiad in Informatics

July 28 – August 4, 2017 Tehran, Iran

No. 3 - Sunday, July 30, 2017



Islamic Republic of Iran
Ministry of Education



Shahid Rajaei
Teacher Training University



Young Scholars Club



Sharif University of
Technology

Quick Guide to Contest Rules

- There will be two competition days. On each day contestants will be given three tasks to complete in five hours.
- Each contestant will receive the official English version of tasks in an envelope on each contest day.
- In the competition room, blank paper and writing tools will be provided.
- Any attempt to bring any items not cleared beforehand into the competition room will be considered cheating.
- Each contestant will have a pre-assigned workstation.
- During the competition, contestants may submit written questions concerning any ambiguities or items needing clarification in the competition tasks.
- Contestants should phrase their questions so that a yes/no answer will be meaningful.
- The workstations have network access to the grading system, as well as facilities such as printing and solution submission.
- Contestants must submit their solutions for tasks by using the grading system.
- Contestants may ask the support staff for assistance at any time.
- Three warnings will be given at 15 minutes, 5 minutes, and 1 minute before the end of the competition by an audible signal.
- A Team Leader may file an appeal by completing an Appeal Form, and submitting it to the Scientific Committee at least 30 minutes prior to the final GA meeting of that competition day.

Iran Education Minister Welcomes IOI 2017 Participants



Dr. Fakhruddin Ahmadi Danesh-Ashtiani

Over 300 students from 84 countries around the world attended the official opening ceremony of the 29th International Olympiad in Informatics that was held Saturday afternoon at Tehran's Milad Tower.

As the organizer and administrator of the global event, Education Minister Fakhruddin Ahmadi Danesh-Ashtiani had a message to all delegations on the opening day of the Olympiad.

His message was read on his by Dr. Hamidreza Azemati, director of Shahid Rajaei Teacher Training University of Tehran and executive director of IOI 2017. The full text is as follows.

Distinguished contestants, team leaders and organizers,

I would like to express my gratitude for

the privilege of hosting you all in the 29th International Olympiad in Informatics. We warmly welcome you and hope you will have an unforgettable stay in Tehran.

We pay tribute to the presence of young contestants in Iran, a country of peace-loving people, with so many well-known great scholars such as Avicenna, Kharazmi, Biruni, and Khajeh Nasir, and also contemporary scientists like Professor Majid Samiei and Professor Maryam Mirzakhani.

Each and every one of you dear contestants have also come from countries that are considered cradles for an honored civilization and culture.

Knowledge can be considered as God's greatest gift to human being, giving him superiority over other animals.

In today's world, development can be only achieved by science and knowledge. International Olympiads are good opportunities for scientists and cultural exchange among different countries to achieve sustainable progress and peace through logic and mutual understanding.

Among different sciences, computer and informatics are most influential in the acceleration of development and promotion of welfare in human societies. Young people may be encouraged to actively participate in the process of development and promotion through international contests, among which the International Olympiad in Informatics in



Dr. Hamidreza Azemati

really outstanding.

My beloved sons and daughters, I appreciate your participation in this scientific contest and hope your efforts and perseverance will be fruitful for all people around the world.

In the end, I am grateful to my colleagues who were instrumental in the implementation of this international event. I am thankful to the Deputy Ministry of Support and Management Development, to the National Organization for Development of Exceptional Talents, and to the esteemed professors from Sharif University of Technology.

Last but not least, I express my gratitude to Shahid Rajaei Teacher Training University for their sincere cooperation.

Thank you,

Fakhruddin Ahmadi Danesh-Ashtiani

What Happened During the Opening Ceremony?

- 84 teams and 300 students attended opening ceremony.
- Mr. Hamidreza Azemati cited the Education Minister's message on his behalf.
- A motion graphic introduced IOI hosts in the previous years.

- President of IOI Krassimir Neteltchev Manev addressed the audience. He reviewed the history of IOI and its rapid progress during the past 29 years.
- Ethnic Jipsai Band from North East of Iran performed a folklore dance.

- All participating countries were introduced with their flags, students and leaders.
- Local Damour Vocal Band also performed a folklore song from north of Iran.

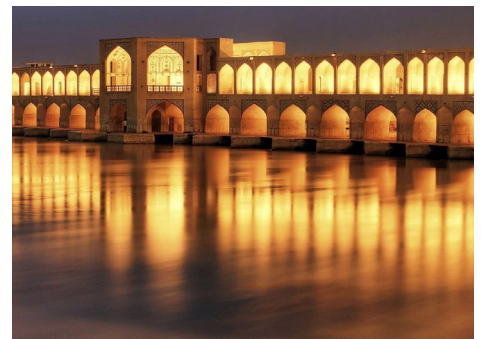
Iran at a Glance: Isfahan

Isfahan is a city in the central Iran and is the capital of Isfahan Province. Isfahan is commonly referred to as «half of the world».

An ancient city and capital of classic Persia from 1598 to 1722, it was long known for its fine carpets and silver filigree. Today, textile industry and steel mills have replaced the old industry. The architecture of Isfahan, tree-lined boulevards, and brick bridges over Zayandeh-rood river make it one of the highlights of Iran. The city is 430km south of Tehran at the

foothills of the Zagros mountain range. It enjoys a temperate climate and regular seasons. Isfahan is located on the main north-south and east-west routes crossing Iran.

Isfahan houses some of the most interesting tourist attractions today. Some of these attractions include: Ali Qapu or the Royal Palace, Talar Ashraf or the Palace of Ashraf, Hasht Behesht (the Palace of Eight Paradises), and Chehel Sotoun (the Palace of forty columns).



Close-Up



Australian team



Finnish team

Friday was the first day of visit for most IOI teams as they enjoyed their expedition to the sprawling city of Tehran. On Friday, contestants and team leaders from different nationalities also met up in the lobby of Parsian Evin Hotel. They used this opportunity to socialize and get to know each other.

“I’m really looking forward to IOI 2017,” said 18-year-old Jerry Mao from Australia. “We all got roses [we were warmly welcomed] in the airport, which was very unexpected and made us feel special.”

Mao’s is attending the IOI for the third time while his teammate Charles Jameson is a first-timer.

“I’m looking forward to this year’s IOI as well,” Jameson added noting that he has not been to IOI before and never seen what it is like to be part of this tournament.

Mao hopes to face challenging problems in the contest. He was also

satisfied with the planning and organization behind IOI 2017. “Everything is very well organized, and I’m looking forward to having lots of great people to talk to,” he said.

Finnish team leader Ada-Maaria Hyvärinen and deputy leader Lari Sinisalo believe this event is going to be exciting. They believe everything signals an expectation for a great experience. Ada-Maaria and Lari previously attended the IOI 2009 in Bulgaria. This year they represent Finland with four contestants.

They were both fascinated by Tehran’s magnificence. “We have not seen much of Iran yet, but what we have seen so far looks nice,” said Lari on his first day of visit.

“It is a very beautiful city, but warmer than I’d expected,” said Hyvärinen from Finland. She expects her team to have a pleasant time and do their best in the competition.



TODAY'S SCHEDULE SUNDAY JULY 30

Time	Contestants	Leaders	Visitors
06:00 – 08:00	Breakfast	Breakfast	
08:00 – 09:00	Entering Contest Hall		
09:00 – 10:00	Contest	IOI Conference	Transfer
10:00 – 12:00			Sa’dabad Palace
12:00 – 13:00			Tajrish Bazaar
13:00 – 14:00			Transfer
14:00 – 15:30	Lunch (Evin Hotel)		
15:30 – 17:00	Day 1 Results and Appeals		Free Time
17:00 – 18:00	Transfer		
18:00 – 19:30	Gonbad Mina Planetarium	Nature Bridge	
19:30 – 20:30	Dinner (Ab o Atash Park)		
20:30 – 21:30	Nature Bridge	Transfer	
21:30 – 22:30	Transfer	GA Meeting 4: Review Appeals	Free Time

Places to Visit: Sunday



Sa’dabad Complex
Sa’dabad Complex is a 300-hectare garden built by Qajar and Pahlavi monarchs. Sa’adabad is located at north of Tehran. Today, the official residence of the President of Iran is located adjacent to the complex.
First built in the 19th century, the complex includes more than 180 hectares of natural forest, streets, qanats, galleries, and museums.
After an expansion of the compounds, Reza Shah of the Pahlavi Dynasty lived there in the 1920s. His son, Mohammad Reza Pahlavi, moved there in the 1970s. After the 1979 Revolution, the complex was turned to a museum.
Sa’d Abad has 18 palaces, seven of which have repurposed to museums. Mellat Palace Museum (White Palace), Fine Arts Museum, Green Palace Museum, Master MirEmad Calligraphy Museum, Royal Costume Museum, and Master Behzad Museum are located within the complex.



Tajrish Bazaar (Market)
Tajrish bazaar, in the northern parts of Tehran, is one of the oldest areas of Tehran. it is close to Emamzadeh Saleh Mausoleum as well as Velenjak, Darband and Darakeh mountain resorts. It was built according to architectural styles of other traditional bazaars in Tehran. It is a great venue for a spot of afternoon shopping, relaxing, drinking a coffee and enjoying the weather and the view of mountains. With a central section selling fresh fruit and vegetables, as well as traditional Iranian sweets, the bazaar also offers everyday items alongside traditional crafts and touristy goods.
The bazaar is has a covered roof and has many passage ways leading to different sections where you can purchase goods. Spices, dairy, clothes, fabrics, nuts and dried fruits, traditional cookware, fruits, veggies, etc. can be found in Tajrish Bazaar. The Bazaar also houses an excellent value kebab restaurants and teahouses.



Ab-o-Atash Park
Ab-o-Atash Park (the “Water-and-Fire Park”), is a park in northern Tehran, Iran. The park has an exclusive area designed for water-playing, alongside four fire-towers which make fire flames as high as 6 to 8 meters, with the whole presentation accompanied by music. There is also an amphitheater in the park, with a capacity of 370 people. Other features of the park include horse training, a light house, gazebos, a grand planetarium, and several interior cafeterias.
Ab-o-Atash Park is connected to Nowruz Park by the suspension bridge of Abrisham, and to Taleqani Forest Park by the largest pedestrian overpass of Tehran, Tabiat (Nature) Bridge. It is also attached to Banader Park, with a light house in between.



Tabiat (Nature) Bridge
Nature Bridge or Tabiat Bridge is the largest pedestrian overpass built in Tehran, Iran. The 270-metre (890 ft) bridge has won several awards, including the Popular Choice Prize for Highways and Bridges from the Architizer A+ Awards, a global architectural competition based in New York.



Gonbad-e-Mina Planetarium
Golnbad-e-Mina (Dome of Mina) Planetarium is the largest 3-D planetarium in the Middle East, located in the heart of Ab-o-Atash Park. It is designed in the shape of a sphere showing all stars, planets and other celestial bodies for entertainment and educational purposes.
The planetarium offers visitors a view of the sky projected on the ceiling. There is a projector at the center of the planetarium and separate projectors for the Sun, the Moon and other planets and stars. It is a theatre built primarily for presenting educational and entertaining shows about astronomy and the night sky, or for training in celestial navigation.